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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/826,189  | 04/16/2004  | Patrick Scholten     | P10670.01           | 9794             |
| 27581   | 7590        | 04/14/2006           | EXAMINER            |                  |
| MEDTRONIC, INC.<br>710 MEDTRONIC PARK<br>MINNEAPOLIS, MN 55432-9924 |             |                      | ALTER, ALYSSA M     |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 3762                |                  |

DATE MAILED: 04/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/826,189

Applicant(s)

SCHOLTEN ET AL.

Examiner

Alyssa M. Alter

Art Unit

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed January 30, 2006 have been fully considered but they are not persuasive for reasons stated below. The examiner notes that the improper list of claims was addressed in the Remarks on page 3. The listed claims on page 3 were 1-4, 6, 8, 10, 14, 16-17, 19-27, 29, 31, 33, 37, 39-40 and 42-48. In fact the proper list of claims should have been 1-4, 8, 12, 14, 18, 22-32, 36, 38, 40, 42, 46, and 50-54. The examiner considers this a typographical error and has treated the arguments in respects to claims 1-4, 8, 12, 14, 18, 22-32, 36, 38, 40, 42, 46, and 50-54.

### ***Double Patenting***

Claims 1-54 of this application conflict with claims 1-48 of Application No. 10/424,538 (US Patent Publication 20040215276 A1). 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

1. Claims 1-4, 8, 12, 14, 16-17, 22-23, 25-32, 36, 40, 42, 44-45, 50-51 and 53-54 stand provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-4, 6, 8, 10, 12-14, 16-17, 20-27, 29, 31, 33, 35-36, 39-40 and 43-44 of copending Application No. 10/424,538 (US Patent Publication 20040215276 A1). This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

2. Claims 5-7, 9-11, 13, 15, 18-21, 24, 33-35, 37-39, 41, 43, 46-49 and 52 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 5, 7, 9, 11, 15, 18-19, 28, 30, 32, 34, 37-38, 41-42 and 45-48 of copending Application No. 10/424,538 (US Patent Publication 20040215276 A1). Although the conflicting claims are not identical, they are not patentably distinct from each other because they both disclose the comparison of a sensed morphological characteristic to a threshold value.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-4, 8, 12, 14, 18, 22-32, 36, 38, 40, 42, 46, and 50-54 are rejected under 35 U.S.C. 102(b) as being anticipated by Florio et al. (US Patent Publication 20010049542 A1) for reasons previously made of record.

The Applicant argues the Florio et al. does not delivery a pacing pulse to a given chamber, sense within that chamber and determine, based upon morphological characteristics whether the pacing pulse captures that chamber of the heart.

However, Florio et al. discloses on page 3, paragraph 25, the "present invention is capable of sensing a composite cardiac signal on a single sense channel that has, inherent in it, characteristics that permit the detection of non-capture, single-chamber capture, and bi-chamber capture. While the illustrated embodiments are directed towards a bi-ventricular stimulation device, the present invention can be equally applied in a bi-atrial mode of stimulation".

"The IEGM characteristics for non-capture, single-chamber capture and bi-ventricular capture are compared to newly acquired IEGM waveforms during normal operation of the stimulation device, to determine whether the newly acquired IEGM represents failed capture, single-chamber capture, or bi-ventricular capture". [0027]

Also, "sampled IEGM waveforms during both single-chamber capture and bi-ventricular capture are processed by a morphology detector that measures and stores defining characteristics of the single-chamber capture and bi-ventricular capture. For example, peak detection, slope detection, waveform integration, and timing interval estimation can be performed with results stored in memory. Then, during normal

operation of the stimulation device, a newly sampled IEGM waveform can be processed in the same way to allow comparison of its waveform characteristics to single-chamber capture or bi-ventricular capture characteristics. In this way, reliable and automatic detection of capture during bi-ventricular pacing is achieved" page 3, paragraph 28).

Florio et al. also further discloses on page 8, paragraph 103, "One or more of these IEGM characteristics are then used by the method of the present invention, as it will be described below, in order to distinguish between single-chamber capture, bi-ventricular capture, or complete loss of capture, based on comparisons made between an acquired IEGM during normal stimulation device operation and the known characteristics of the IEGM during the three capture situations".

Therefore, Florio et al. does disclose the use of morphological analysis to determine whether capture has occurred and thus the rejection still stands.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 5, 9, 13, 15, 19, 33, 37, 41, 43, and 47 stand rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Florio et al. (US Patent Publication 20010049542 A1) for reasons previously made

of record. As stated above, Florio et al. does disclose the use of morphological analysis to determine whether capture has occurred. Therefore, the rejection still stands.

2. Claims 6-7, 10-11, 16-17, 20-21, 34-35, 38-39, 44-45 and 48-49 stand rejected under 35 U.S.C. 103(a) as being unpatentable modified Florio et al. (US Patent Publication 20010049542 A1) as applied to claims 5, 9, 13, 15, 19, 33, 37, 41, 43, and 47 above, in view of Meyer et al. (US 20040082975 A1) for reasons previously made of record. As stated above, Florio et al. does disclose the use of morphological analysis to determine whether capture has occurred. Therefore, the rejection still stands.

### ***Claim Objections***

1. Claims 6-7, 14-15, 29-30 and 37-38 stand objected to because of the following informalities: Claims 14-15 and 37-38 are substantial duplicates of 6-7 and 29-30, respectively. Appropriate correction is required.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

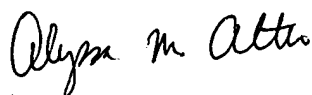
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of


the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alyssa M. Alter whose telephone number is (571) 272-4939. The examiner can normally be reached on M-F 9am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Alyssa M Alter  
Examiner  
Art Unit 3762

  
JEFFREY R. JASTRZAB  
PRIMARY EXAMINER  
4/12/06